

## CLAIMS

We claim:

1. An apparatus for determining a dimension of an object traveling on a moving conveyor, the apparatus having means for moving a scanning beam across the conveyor such that the beam repeatedly intercepts the object at an angle  $\theta$  relative to a plane extending through the conveyor, the apparatus characterized by:

5                   detecting means having a line field of view which maintains a constant orientation relative to the scanning beam as the beam moves across the conveyor and receives a reflected image of the beam at a plurality of image points; and

                  means for calculating the object dimension at each image point based upon the reflected images.